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**Farley et al.**(54) **VIRAL VECTOR PRODUCTION SYSTEM**(71) Applicant: **Oxford BioMedica (UK) Limited,**  
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**2740/15051** (2013.01)(57) **ABSTRACT**

Disclosed herein are viral vector production systems secreting nuclease for degradation of residual nucleic acid during viral vector production and methods of the same. Such a viral vector production system comprises a viral vector production cell comprising nucleic acid sequences encoding: 1) viral vector components; and 2) a nuclease, wherein the nuclease is expressed in the production cell and secreted in cell culture thereby degrading residual nucleic acid during viral vector production. Another such viral vector production system comprises 1) a viral vector production cell comprising nucleic acid sequences encoding viral vector components; and 2) a nuclease helper cell comprising a nucleic acid sequence encoding a nuclease, wherein the nuclease is expressed and secreted in co-culture of the production cell of 1) and the helper cell of 2), thereby degrading residual nucleic acid during viral vector production.

**Specification includes a Sequence Listing.**